

A NEW SPECIES OF *TREPADONIA*
(ASTERACEAE: VERNONIEAE) FROM PERU

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ABSTRACT

Trepadonia oppositifolia (Asteraceae: Vernonieae) is described from Peru and a key is presented for the two species of the genus.

RESUMEN

Se describe *Trepadonia oppositifolia* (Asteraceae: Vernonieae) de Perú y se presenta una clave para las dos especies del género.

Trepadonia was established as a genus separate from the broad concept of *Vernonia* (Jones 1980) by Robinson (1994) based on the one Peruvian species, *Vernonia mexiae* (Robinson 1981). The genus is based on the totally scandent habit and the 90°-angle branching of the primary branches of the inflorescence. The species also has distinctive racemose branchlets in the inflorescence. A second species, *Trepadonia oppositifolia* is described herein, also from Peru, differing by having opposite leaves, cymiform inflorescence branchlets, and more florets in the heads. The new species occurs in southern Peru, and if distributions of cohabitants such as the bamboo *Guadua* are indicative, the new species may be found eventually in nearby western Brazil.

Trepadonia oppositifolia H. Rob. & H. Beltrán, sp. nov. (**Fig. 1**). TYPE: PERU: DPTO. CUZCO: Provincia La Convencion, Echarati, Cashiriari-3 Well Site, 5 km S of Camisea River; 11°52'57.1 S, 72°39'6.1 W, 700 m, upland forest mixed with "paca" *Guadua sarcocarpa*, vine, petals pale purple, clearing, 2 Sep 1998; P. Nuñez, H. Beltrán, W. Nauray R. de la Colina, J. Tenteyo et al. 23967 (HOLOTYPE: US; ISOTYPE USM, CUZ).

A *T. mexiae* in foliis oppositis ramulis inflorescentii cymiformis et floribus 18–23 in capitulo differt. Scandent, to 8–9 m high; branches striate, glabrous. Leaves opposite; petioles mostly 1.0–1.5 cm long, base dilated and reddish; lamina ovate, 11–13 cm long, 5–7 cm wide, base rounded, margins entire to slightly undulate, apex acuminate, adaxial surface bright green, glabrous, abaxial surface paler green, puberulous with minute hairs, venation pinnate, ca. 9–10 pairs of widely spreading secondary veins. Inflorescence rather thyrsoid-paniculate, with primary and secondary branching mostly spreading at 90°-angles, branchlets cymose. Heads separate, mostly sessile, homogamous; involucre campanulate, 3–4 mm high, 4–5 mm wide; involucral bracts ca. 28, gradate in 3–4 series; outer bracts ovate, 2 mm long, 1 mm wide, puberulous outside, brown at apex, inner bracts



FIG. 1. *Trepadonia oppositifolia* H. Rob. & H. Beltrán. Live plant.

oblong-lanceolate, 4 mm long, 1 mm wide, glabrous. Florets 18–23; corollas purple, glabrous, ca. 5 mm long, tube 2 mm long, throat ca. 1 mm long, 1 mm wide, lobes erect, lanceolate, ca. 2 mm long. Cypselas 2 mm long, 0.5 mm wide, 10-costate, with many short appressed setulae; pappus bristles white, ca. 38, 4 mm long, scabrid, squamae of outer series ca. 0.9–1.2 mm long, scabrid. Pollen ca. 37 μ m in diameter in fluid, tricolporate, non-lophate.

PARATYPE: PERU. DPTO. CUZCO: Provincia La Convencion, Echarati, Cashiriara-3 Well Site, 5 km south of Camisea River; 11°52'57.1 S, 72°39'6.1 W, 700 m, 2 Sep 1998, P. Nuñez, H. Beltran, W. Nauray, R. de la Colina, J. Tenteyo 23842 (CUZ, US).

KEY TO THE SPECIES OF *TREPADONIA*

- 1a. Leaves alternate, blade oblong-ovate; branchlets of inflorescence racemiform; heads with 8–10 florets _____ **T. mexiae**
 1b. Leaves opposite, blades ovate; branchlets of inflorescence cymiform; heads with 18–23 florets _____ **T. oppositifolia**

Leaves of the Vernoniaceae are usually alternate. Opposite and verticillate leaves are comparatively rare in the tribe, being most common in the Neotropical subtribe Piptocarphinae and the African genus *Bothriocline* Oliv. ex Benth. In the subtribe Vernoniinae, to which *Trepadonia* belongs, opposite or verticillate leaves have previously been known only in one Jamaican species of *Lepidaploa* and one Colombian variety of another species of *Lepidaploa* (Robinson 1999). The character is almost always variable within the genera in which it occurs. Only in the Andean genus *Joseanthus* H. Rob., of the Piptocarphinae, with five species, are all the species opposite-leaved.

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